

Notice of Allowability

Application No.

09/963,727

Applicant(s)

JIANG ET AL.

Examiner

Daniel J Petkovsek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the after final amendment to the declaration received on August 13, 2003.
2. ☒ The allowed claim(s) is/are 1-50.
3. ☒ The drawings filed on 26 September 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

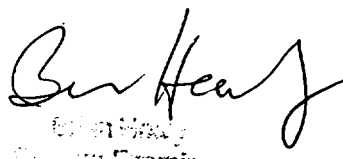
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |


Daniel J. Petkovsek
Examiner

DETAILED ACTION

This office action is in response to the new amended declaration.

Oath/Declaration

1. The changes to the declaration have been acknowledged, as the declaration presents evidence that establishes reduction to practice of the invention in the United States or a NAFTA or WTO member country prior to the effective date of the Tian '132 reference.

Allowable Subject Matter

2. Claims 1-50 are allowed. The following is an examiner's statement of reasons for allowance: The relevant prior art does not teach or reasonably suggest (claims 11-37) a method of fusion splicing of optical fibers, in that a first fiber is formed of a silica glass and a second fiber is formed comprising a core with a first multi-component glass, and an outer cladding with a second multi-component glass, the second multi-component glass having a softening point higher (and being more compatible for forming thermal bonds with silica glass) than the first multi-component glass. The method includes generating heat so the second fiber softens, but the first silica fiber does not soften, and a thermal diffusion bond develops between the first fiber and the second fiber's outer cladding.

Regarding claims 38-41, the prior art does not teach or reasonably disclose a method of drawing a multi-component fiber that is compatible with fusion splicing in which the properties of the second fiber exist as stated above.

Regarding claims 42-48, the minor informalities previously objected to have been corrected by the amendment filed June 3, 2003. The claims are allowable for the same reasons

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as given above, with particular reference to the second fiber with two multi-component layers for adjoining the silica fiber to the cladding of the second fiber.

Regarding claims 7-10, the amendment to include allowable subject material into the independent claim, as suggested in the previous office action, has been acknowledged. The relevant art does not teach or reasonably suggest the percentages of the multi-component glass in claim 7, or the restrictions of the second multi-component fiber in claims 8-10.

Regarding claims 1-6 and 50, the relevant prior art does not disclose or reasonably suggest a method that requires assymetrical heating of the fibers such that the T_{si} is greater than the T_{mc} at the gap between the fibers, and T_{mc} is greater than the first multi-component glass, and where T_{si} is less than the softening temperature of the silica glass.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J Petkovsek whose telephone number is (703) 305-6919. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9321.



Daniel Petkovsek
August 26, 2003



Susan Healy
Receptionist